

REMARKS

Applicant respectfully requests reconsideration of the rejection of this application as examined pursuant to the office action of September 7, 2005. In the office action, Claims 1-11 were examined. New Claims 12-16 have been added. Therefore, Claims 1-16 are pending.

In the office action, Claim 1 was rejected under 35 USC § 103(a) as being unpatentable over US Patent No. 3,204,920 issued to Generke in view of US Patent No. 4,919,169 issued to Bachmann et al. Claims 2 and 5 were rejected under 35 USC § 103(a) as being unpatentable over Generke in view of Bachmann and US Patent No. 3,060,762 issued to Lutz. Applicant notes that the Lutz reference was cited in the office action but not specifically listed in the Notice of References Cited accompanying the office action. It is hereby requested that a supplemental Notice of References Cited be entered to include the citation to the Lutz reference. Claim 3 was rejected under 35 USC § 103(a) as being unpatentable over Generke in view of Bachmann and US Patent No. 6,537,033 issued to Brazil et al. Claim 4 was rejected under 35 USC § 103(a) as being unpatentable over Generke in view of Bachmann and US Patent No. 3,622,119 issued to Weber. Finally, Claims 6-11 were objected to as being made dependent upon a rejected base claim.

Applicant has taken this opportunity to amend independent Claim 1 to further distinguish the present invention from the cited reference. Claim 1 has been amended to note that the drive frame is connectable to the diverter to permit pivotal movement of the drive frame assembly with respect to the diverter, and that the screw assembly is pivotally connected to the drive frame assembly and configured to cause pivotal movement of the crank arm assembly with respect to the screw assembly. New Claims 12-16 include the same novel aspect of the invention. Specifically, the crank arm assembly of the present invention pivots with respect to the drive frame assembly, and the screw assembly pivots with respect to the drive frame assembly. These features of the present invention result in an actuation system that is an electromechanical device capable of moving damper flaps of the type that have heretofore only been moved by hydraulic actuators.

The 35 USC § 103(a) Rejections

Claim 1 as filed was rejected as being obvious in view of the combination of Generke and Bachmann. A careful review of the valve operator described by Generke clearly shows that the device is different from the present invention as now claimed. With reference to figures 7 and 8 of Generke as cited in the September 7, 2005, office action, it appears that the crank arms 116 and 118 may arguably correspond to the crank arm assembly 35 of the present invention. Further, the lead screw 94 of the Generke valve operator may arguably correspond to the rotatable rod 47 of the present invention. Yet further, the elongated links 122 and 124 of the Generke device may arguably correspond to the drive frame assembly 20 of the present invention. The elongated links 122 and 124 of Generke connected to follower 134 move axially (linearly) along the lead screw 94. That is, the connection between the two is linear, not pivotal. See column 5, lines 60-71 of Generke. On the other hand, the rotatable rod 47 of the screw assembly 45 of the present invention is pivotally connected to the drive frame assembly 20, as stated in amended Claim 1 and new independent Claim 12. This aspect distinguishes the present invention from the valve operator disclosed by Generke.

The Bachmann reference was cited for showing a diverter with a toggle tube. The present invention is not limited solely to such types of diverters, as noted in paragraph [012] of the application as filed. In any case, the Bachmann reference similarly fails to disclose an actuation system as described by amended Claim 1. That is, the Bachmann reference does not teach or suggest a pivotal crank arm assembly and a pivotal screw assembly connected to the drive frame assembly. Moreover, there is no suggestion in Lutz to combine the device described therein with the devices of Generke and Bachmann to form the present invention.

Applicant respectfully notes that the amendment made to independent Claim 1 and the arguments presented successfully traverse the rejection of Claim 1 as filed under 35 USC § 103(a) based on the combination of the Generke and Bachmann references. Withdrawal of that rejection is therefore requested.

Claims 2 and 5 as filed were rejected as being obvious in view of the combination of Generke, Bachmann and Lutz. Applicant incorporates herein the remarks made above in regard to the amendment made to Claim 1, upon which Claims 2 and 5 depend, and the Generke and Bachmann references. The Lutz reference was cited for the limited purpose of representing a particular screw and shaft arrangement. The present invention is not limited to a particular screw

arrangement. Instead, it is the arrangement of the screw assembly with respect to the drive frame assembly and the crank arm assembly that is the focus of the present invention. The Lutz reference fails to disclose an actuation system as described by amended Claim 1. That is, the Lutz reference does not teach or suggest a pivotal crank arm assembly and a pivotal screw assembly connected to the drive frame assembly. Further, there is no suggestion in Lutz to combine the device described therein with the devices of Generke and Bachmann to form the present invention.

Applicant respectfully notes that the amendment made to independent Claim 1 and the arguments presented successfully traverse the rejection of dependent Claims 2 and 5 under 35 USC § 103(a) based on the combination of the Generke, Bachmann and Lutz references. Withdrawal of that rejection is therefore requested.

Claim 3 as filed was rejected as being obvious in view of the combination of Generke, Bachmann and Brazil. Applicant incorporates herein the remarks made above in regard to the amendment made to Claim 1, upon which Claim 3 depends, and the Generke and Bachmann references. The Brazil reference was cited for the limited purpose of representing a particular drive motor type. The present invention is not limited to a particular drive motor type. Instead, it is the arrangement of the screw assembly with respect to the drive frame assembly and the crank arm assembly that is the focus of the present invention. The Brazil reference fails to disclose an actuation system as described by amended Claim 1. That is, the Brazil reference does not teach or suggest a pivotal crank arm assembly and a pivotal screw assembly connected to the drive frame assembly. Further, there is no suggestion in Brazil to combine the device described therein with the devices of Generke and Bachmann to form the present invention.

Applicant respectfully notes that the amendment made to independent Claim 1 and the arguments presented successfully traverse the rejection of dependent Claim 3 under 35 USC § 103(a) based on the combination of the Generke, Bachmann and Brazil references. Withdrawal of that rejection is therefore requested.

Claim 4 as filed was rejected as being obvious in view of the combination of Generke, Bachmann and Weber. Applicant incorporates herein the remarks made above in regard to the amendment made to Claim 1, upon which Claim 4 depends, and the Generke and Bachmann

references. The Weber reference was cited for the limited purpose of showing a ball screw mechanism with lockout. The present invention is not limited to a particular lockout mechanism. Instead, it is the arrangement of the screw assembly with respect to the drive frame assembly and the crank arm assembly that is the focus of the present invention. The Weber reference fails to disclose an actuation system as described by amended Claim 1. That is, the Weber reference does not teach or suggest a pivotal crank arm assembly and a pivotal screw assembly connected to the drive frame assembly. Further, there is no suggestion in Weber to combine the device described therein with the devices of Generke and Bachmann to form the present invention.

Applicant respectfully notes that the amendment made to independent Claim 1 and the arguments presented successfully traverse the rejection of dependent Claim 4 under 35 USC § 103(a) based on the combination of the Generke, Bachmann and Weber references. Withdrawal of that rejection is therefore requested.

CONCLUSION

In view of the foregoing amendments made to the independent claims and the remarks made herein, Applicant respectfully suggests that the rejections under 35 § 103(a) have been successfully traversed. Allowance of pending Claims 1-16 is therefore requested.

By this amendment, five new claims have been added, one of which is independent. The total number of claims presently pending is 16, and the number of presently pending independent claims is two. Therefore, no additional filing fee is required.

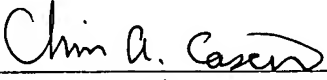
Respectfully submitted,



Chris A. Caseiro, Reg. No. 34,304
Attorney for Applicant
Verrill Dana, LLP
One Portland Square
Portland, ME 04112-0586
Tel. No. 207-253-4530

Certificate of Mailing

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop Fee Amendment, Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450, on March 6, 2006. It is hereby requested that this filing be granted a filing date of March 6, 2006.


Chris A. Caseiro